NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

F A C T S H E E T

(pursuant to NAC 445A.236)

Permittee: Barrick Goldstrike Mines Inc.
P.O. Box 29
Elko, Nevada 89803

Permit: NV0022675 - Renewal

Location: Boulder Valley Water Treatment Plant – Outfall 001
approximately 27 miles northwest of Carlin
Eureka County, Nevada
Latitude: 40º 56′ 49″ N; Longitude 116º 26′ 41″ W
Township 36 N, Range 49 E, Section 33 MDB&M

Humboldt River Discharge – Outfall 002
approximately 3 miles west of Dunphy
Eureka County, Nevada
Latitude: 40° 42' 14" N; Longitude: 116° 34' 44" W
Township 33 N, Range 48 E, Section 29 MDB&M

General: The Permittee has applied for a National Pollutant Discharge Elimination System (NPDES) permit renewal to extend the authorization to discharge a maximum of 100.8 million gallons per day (MGD), 30-day average, of treated groundwater to the Humboldt River. The Permittee has not discharged under NPDES Permit NV0022675 since February 1999. A re-issued permit will maintain operational flexibility and allow for rapid response to market fluctuations.

The Permittee owns and operates a gold mining operation located in Eureka and Elko Counties, Nevada. To ensure stability of open pit mine walls, to enable the development of underground mines, and to facilitate optimum recovery of the precious metals resources, the Permittee has developed and implemented a groundwater management program; pumping started in 1990. Within the cone of depression created by the groundwater pumping, there are several gold deposits owned by the Permittee, as well as other mining companies. The Permittee may enter into agreements with other companies to accept, treat, and discharge water produced by other mining companies under this permit. According to the Permittee, this NPDES discharge permit is expected to be adequate to manage surface discharge rates associated with existing and presently anticipated mining development in the Little Boulder Basin area.

The de-watering water is used as make-up water for mining operations and processing, and as irrigation water in Boulder Valley. In addition to the surface water discharge, excess water is permitted for infiltration, the least expensive disposal option, and injection into the groundwater system in Boulder Valley. These activities are authorized by other permits and approvals. The NPDES permit will cover water pumped from the TS Ranch Dam coffer pond for treatment and discharge to surface waters only.

The groundwater associated with the discharge is carbonate saturated with associated calcium and magnesium hardness. The quality of the raw groundwater is generally good, however, it does not meet the Humboldt River water quality standards for total dissolved solids (TDS), boron, fluoride, dissolved oxygen, and temperature. Therefore, in order to discharge, the water must be treated to meet the appropriate standards. The treatment process includes precipitation, clarification/settling, and

neutralization followed by cooling through cooling towers. The treatment process results in compliance with all Humboldt River, Battle Mountain Gage, drinking water, aquatic life, and irrigation standards at the discharge points.

An individual containment structure was constructed to contain 110% of the volume of the acid storage tank and the milk of lime slurry, magnesium sulfate, tank. The other chemicals used in the treatment process do not require secondary containment. The treatment site is graded and bermed to divert any spill to an unlined pond that is designed to contain 110% of the clarifier volume, the largest vessel, plus the contribution from the 25-year, 24-hour storm event. The clarifier sludge will be trucked to the processing area and used in the autoclave processing of sulfide ores.

The approximately 20-mile long conveyance system connects the treatment facilities with the Humboldt River outfall through a system of pipelines and lined open channels and ponds. The upper section of the conveyance system is a buried pipeline to eliminate any potential conflicts associated with wildlife migration routes or the center pivot irrigation fields. The upper section consists of approximately 4,300 feet of 66-inch diameter and 23,500 feet of 48-inch diameter epoxy-lined steel pipe. In the 73,000-foot central section, a 60-mil HDPE lined and fenced open canal was constructed to convey the water to the 90-foot square, 60-mil HDPE lined compensating pond. A concrete head structure in the pond marks the start of the lower pipeline section with the first 2,000 feet of this reinforced concrete pipe being 84-inch diameter and the remaining 4,600 feet being 72-inch diameter. The pipeline crosses Whitehouse Creek and the Union Pacific railroad tracks to the Humboldt River. A slotted, steel diffuser was installed at the end of the concrete pipe to reduce the potential for erosion and scouring of the riverbed and bank. This area of the river is armored with riprap. The Whitehouse Ditch outfall has not been designed.

Receiving Water Characteristics: The Humboldt River at the Battle Mountain Gage, NAC 445A.205, standards apply to this stream segment. The listed beneficial uses of this segment include aquatic life (warm-water fishery), water contact recreation, wildlife propagation, irrigation, stock watering, municipal or domestic supply, and non-contact recreation.

Humboldt River water in the area of the discharges, from the Palisade Gage to the Battle Mountain Gage, is a calcium-bicarbonate type with a pH range of 8.2 S.U., February 2002, to 8.6 S.U., June 2004. TDS and specific conductance generally range from 250 to 426 milligrams per liter (mg/L) and 413 to 700 micromhos per centimeter, respectively. From January 2002 through August 2004, the data available on the Bureau of Water Quality Planning website from the term of the current permit, the minimum and maximum TDS concentrations recorded at the Battle Mountain Gage were 274 mg/L, June 2004, and 508 mg/L, December 2002, respectively. Temperature of the river water varies considerably with season, being primarily dependent on ambient air temperature with a minimum temperature of 0°C, February 2002, and a maximum temperature of 28.3°C, July 2003, during the same January 2002 through August 2004 time period. This segment generally meets the appropriate water quality standards except for frequent exceedances of the NAC 445A.205 standards for turbidity, total phosphorus (TP) and total suspended solids (TSS).

From January 2002 through September 2005, the U.S. Geological Survey (USGS) website lists a maximum mean monthly flow of 3,557 cubic feet per second (cfs), May 2005, and a minimum mean monthly flow of 0.000 cfs, September 2002, for the Battle Mountain Gage. Provisional USGS data, lists an April 2006 monthly mean flow of 5,373 cfs at the Gage.

Flow: The draft permit includes permit limitations of 100.8 MGD for the 30-day average discharge and 110.0 MGD for the daily maximum discharge. The Permittee has not discharged since February 5, 1999. During the period of discharge, the 30-day average discharge was 50.9 MGD with the highest 30-day average discharge, 91.6 MGD, in January 1998. The maximum daily flow was 99.8 MGD.

Quantities: Section 303 (d) (1) (C) of the Clean Water Act requires that Total Maximum Daily Loads (TMDLs) shall be established at a level necessary to implement the applicable water quality standards. Any discharge which improves the existing water quality, and has permitted discharge limits as strict or stricter than the water quality standards will be considered in compliance with the TMDLs.

The 2004 303 (d) List for the Humboldt River Basin, Palisade to Battle Mountain, lists existing TMDLs as TP and TSS. The 303 (d) List also includes dissolved zinc, total iron, and turbidity as pollutants or stressors of concern.

The NAC 445A.205 TP standard is an April through November seasonal average of less than 0.1 mg/L. From 1993 through 2004 (this location was not monitored in 2005 and 2006), the TP seasonal average concentration has ranged from 0.07 mg/L in 2001 to 0.28 mg/L in 1998, with a 2004 seasonal average of 0.12 mg/L. A seasonal TP permit limitation of 0.1 mg/L, the water quality standard, may result in an improvement of the existing water quality, therefore, the discharge will be in compliance with the TP TMDL.

The NAC 445A.205 TSS standard is an annual median concentration of less than 80 mg/L with a maximum allowable point source single value discharge of 80 mg/L. From 1993 through 2004 (this location was not monitored in 2005 and 2006), the TSS annual median has ranged from 25 mg/L in 2003 to 188 mg/L in 1996, with a 2004 annual median of 89 mg/L. A daily maximum TSS permit limitation of 30 mg/L and a 30-day average TSS permit limitation of 20 mg/L will result in an annual median TSS concentration less than 80 mg/L and in an improvement of the existing water quality, therefore, the discharge will be in compliance with the TSS TMDL.

Proposed Effluent Limitations: During the period beginning on the effective date of this permit and lasting until the permit expires, the Permittee is authorized to discharge to the Humboldt River through Outfall 002, the unnamed concrete pipeline outfall structure diffuser, and/or Whitehouse Ditch and Rock Creek.

a. Effluent samples taken in compliance with the monitoring requirements specified below shall be taken at the following locations:

    i. At the outfall structure, Outfall 001, of the facility;
    ii. At the outfall structure, Outfall 002, of the unnamed pipeline to the Humboldt River;
    iii. In the Humboldt River, three (3) meters upstream of the confluence with Rock Creek, as near as possible to the centroid of the river flow;
    iv. In the Humboldt River, ten (10) meters downstream of the confluence with Rock Creek, as near as possible to the centroid of the discharge flow;
    v. In the Humboldt River, three (3) meters upstream of the confluence with the unnamed pipeline, as near as possible to the centroid of the river flow;
    vi. In the Humboldt River, ten (10) meters downstream of the confluence with the unnamed pipeline, as near as possible to the centroid of the discharge flow;
    vii. In the Whitehouse Ditch, ten (10) meters downstream of the confluence with the lined canal, as near as possible to the centroid of flow;
    viii. In Rock Creek, three (3) meters upstream of the confluence with Whitehouse Ditch, as near as possible to the centroid of flow; and
    ix. In Rock Creek, ten (10) meters downstream of the confluence with Whitehouse Ditch, as near as possible to the centroid of the discharge flow.

b. The discharge shall be limited and monitored by the Permittee as specified below:

PARAMETERS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	30-Day Average	Daily Maximum	Sample Locations	Measurement Frequency	Sample Type
Flow (MGD)	100.8	110.0	i.	Continuous	Totalizer[1]
Arsenic, Total (µg/L)	----	50	i.	Weekly[3]	Discrete[2]
Chlorides (mg/L)	50[4]	70	i.	Monthly	Discrete
Copper, Total (µg/L)	[5, 19]	[5, 19]	i.	Weekly[3]	Discrete[2]
Dissolved Oxygen (mg/L)	----	≥ 5.0	ii., vii.	Weekly	Discrete[6]
Iron, Total (µg/L)	----	1,000	i.	Weekly[3]	Discrete[2]
Lead, Total (µg/L)	[7, 19]	[7, 19]	i.	Weekly[3]	Discrete[2]
Total Suspended Solids (mg/L)	20	30	i.	Monthly	Discrete
Total Dissolved Solids (mg/L)	425[4]	520	i.	Monthly	Discrete
Total Nitrogen – N (mg/L)	1.9[4]	---[8] 4.0[8]	i.	Monthly	Discrete
Total Ammonia – N, (mg/L)	[9, 19]	[9, 19]	i.	Monthly	Discrete
Sodium (SAR)	8[4]	---	i.	Quarterly	Discrete
Fluoride (µg/L)	----	1,000	i.	Weekly[3]	Discrete
Boron (mg/L)	----	0.75	i.	Weekly[3]	Discrete
Total Phosphorus – P (mg/L)	0.1[10]	---	i.	Weekly[3]	Discrete
Turbidity (NTU)	---	50	i.	Monthly	Discrete
Zinc, Total (µg/L)	[11, 19]	[11, 19]	i.	Monthly	Discrete[2]
pH (SU)	7.0 ≤pH≤8.4[4]	7.0 ≤pH≤8.6	i.	Monthly	Discrete
Profile I[12]	Monitor and Report[13]		i.	Annually[14]	Discrete
Temperature (°C)	Monitor and Report		i., iii., v., viii.	Monthly	Discrete[16]
	$T_{iv} \leq T_{iii} + 2$ [19]		iv.		
	$T_{vi} \leq T_{v} + 2$[19]		vi.		
	$T_{ix} \leq 34$ or $T_{ix} \leq T_{viii} + 3$ [15, 19]		ix.		
Hardness (mg/L as $CaCO_3$)	Monitor and Report		v.	Monthly	Discrete
Cadmium, Total (µg/L)	[17, 19]	[17, 19]	i.	Quarterly[18]	Discrete[2]

Footnotes:

[1]: Flows shall be monitored and recorded at Outfall 001 with a totalizer. Flow is limited to 50.4 MGD via Whitehouse Ditch.

[2]: Analyze as Total Recoverable Metal per 40 CFR § 136.

[3]: Monitoring frequency may be reduced to monthly by the Division after one year of weekly monitoring with no exceedances of the discharge limitations. Monitoring frequency shall revert to weekly with a change in the source of the dewatering water as determined by the reporting required by Part I.A.3.

[4]: Annual average.

[5]: Total Copper

Daily Maximum: concentration (µg/L) = $e^{\{0.9422 \ln(H) - 1.700\}}$ (Acute)

30-day Average: concentration (µg/L) = $e^{\{0.8545 \ln(H) - 1.702\}}$ (Chronic)

Where: H = Hardness of the receiving water.

[6]: The Permittee is required to monitor dissolved oxygen at location ii. only during periods of discharge from the unnamed pipeline to the Humboldt River and to monitor at location vii. only during periods of discharge to Whitehouse Ditch.

[7]: Total Lead

Daily Maximum: concentration (µg/L) = $e^{\{1.273\ \ln(H) - 1.460\}}$ (Acute)
30-day Average: concentration (µg/L) = $e^{\{1.273\ \ln(H) - 4.705\}}$ (Chronic)
Where: H = Hardness of the receiving water.

[8]: The total nitrogen as N (TN) daily maximum of 4.0 mg/L is applicable April through November. There is no TN daily maximum December through March.

[9]: Total Ammonia -N

Daily Maximum:

$$\text{concentration (mg/L)} = \left[\frac{0.0577}{1+10^{7.688-pH}}\right] + \left[\frac{2.487}{1+10^{pH-7.688}}\right] x\, MIN\ [2.85,\ 1.45\ x\ 10^{0.028x(25-T)}]$$

Where: T = discharge temperature in degrees Celsius (°C)
x = multiplication
MIN = the lesser of the two values separated by the comma

30-day Average:

$$\text{concentration (mg/L)} = \left[\frac{0.411}{1+10^{7.204-pH}}\right] + \left[\frac{58.4}{1+10^{pH-7.204}}\right]$$

[10]: The total phosphorus as P (TP) seasonal average of 0.1 mg/L is applicable April through November. There is no TP discharge limitation December through March.

[11]: Total Zinc

Daily Maximum: concentration (µg/L) = $e^{\{0.8473\ \ln(H) + 0.884\}}$ (Acute)
30-day Average: concentration (µg/L) = $e^{\{0.8473\ \ln(H) + 0.884\}}$ (Chronic)
Where: H = Hardness of the receiving water.

[12]: Profile I Parameters: Alkalinity, total as $CaCO_3$; Bicarb, HCO_3; Calcium; Magnesium; Potassium; Sodium; Aluminum; Antimony; Beryllium; Nickel; Barium; Chromium; Manganese; Mercury; Selenium; Silver; and Thallium.

[13]: If a constituent is ≥ 90% of the most restrictive beneficial use standard, pursuant to Nevada Administrative Code (NAC) 445A.144, then the Permittee shall add it to the list of quarterly monitored constituents. Antimony: 146 µg/L; Beryllium: 0* µg/L; Nickel: $e^{\{0.8460\ \ln(H) + 0.0584\}}$ µg/L; Barium: 2,000 µg/L; Chromium: 100 µg/L; Manganese: 200 µg/L; Mercury, dissolved: 0.77 µg/L; Selenium: 5.0 µg/L; Silver: $e^{\{1.72\ln(H) - 6.59\}}$ µg/L; and Thallium: 13 µg/L.

[14]: Annual Profile I characterization of the discharge is required. If possible, the characterization shall occur in the fourth quarter of the calendar year. *Laboratory results that show that beryllium was not detected using a Division accepted method will be deemed to show compliance with the standard unless other information indicates that beryllium may be present.

[15]: When there is no flow in Rock Creek, the discharge temperature from Whitehouse Ditch shall be 34°C or less. When there is flow in Rock Creek, the Whitehouse Ditch discharge temperature shall be no more than 3° C greater than the Rock Creek water temperature. The Permittee shall report which condition applies each quarter of discharge to Whitehouse Ditch.

[16]: The Permittee is required to monitor the temperature at locations iii., iv., viii., and ix. only during periods of discharge to Whitehouse Ditch and monitor the temperature at locations v. and vi. only during periods of discharge from the unnamed pipeline to the Humboldt River.

[17]: Total Cadmium

Daily Maximum: concentration (µg/L) = $e^{\{1.0166\ \ln(H) - 3.924\}}$
30-day Average: concentration (µg/L) = $e^{\{0.7409\ \ln(H) - 4.719\}}$
Where: H = Hardness of the receiving water.

[18]: Monitoring frequency may be reduced to annually by the Division after one year of quarterly monitoring with no exceedances of the aquatic life standards. Monitoring frequency shall revert to quarterly with a change in the source of the dewatering water.

[19]: Calculated limits shall be numerically specified in the DMR table under Permit Requirement.

MGD:	Million gallons per day.	T_{iii}:	Temperature at sampling location iii.
mg/L:	Milligrams per liter.	T_{iv}:	Temperature at sampling location iv.
-N:	As nitrogen.	T_{v}:	Temperature at sampling location v.
SAR:	Sodium adsorption ratio.	T_{vi}:	Temperature at sampling location vi.
-P:	As phosphorus.	T_{viii}:	Temperature at sampling location viii.
NTU:	Nephelometric turbidity units.	T_{ix}:	Temperature at sampling location ix .
SU:	Standard units.	µg/L:	Micrograms per liter.
°C:	Degrees Celsius.	$CaCO_3$:	Calcium carbonate.

Schedule of Compliance and Special Conditions: The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications that the Administrator may make in approving the schedule of compliance.

a. The Permittee shall achieve compliance with the effluent limitations upon resumption of discharge.

b. The Permittee shall provide written notification to the Division sixty (60) days prior to acceptance of water for treatment at the Boulder Valley Water Treatment Plant and/or discharge under this permit from any source other than the Permittee's mine dewatering activities.

c. Within fourteen (14) days of acceptance of water for treatment at the Boulder Valley Water Treatment Plant and/or discharge under this permit from any source other than the Permittee's mine dewatering activities, the Permittee shall notify the Division of such acceptance.

d. Thirty (30) days prior to discharge to Whitehouse Ditch, the Permittee shall submit Nevada licensed Professional Engineer stamped as-built drawings of the diversion to Whitehouse Ditch and all related control structures. A revised O&M Manual shall be submitted at the same time.

e. Within fourteen (14) days of discharge to Whitehouse Ditch, the Permittee shall notify the Division of the discharge.

f. If total chromium is detected in the discharge at a concentration greater than 5 µg/L, the normal analytical detection limit, the Permittee shall complete a study to determine the chromium speciation. This study shall be submitted to the Division within forty-five (45) days of chromium detection.

g. Within fourteen (14) days of detecting total chromium at a concentration greater than 5 µg/L, the Permittee shall notify the Division of the detection.

There are no special conditions.

Rationale for Permit Requirements: The Applicant is proposing to utilize a treatment process which will result in compliance with all Humboldt River water quality standards at the treatment plant outfall (001) except for temperature and dissolved oxygen. The applicable temperature and dissolved oxygen standards will be achieved at Rock Creek and the Humboldt River by use of natural cooling through the proposed conveyance system and by use of cooling towers as needed.

Flow: The flow rates, 110.0 MGD, daily maximum, and 100.8 MGD, 30-day average, are based on the design capacity of the Boulder Valley Water Treatment Plant and the water conveyance system.

Arsenic, total: The arsenic limitation, 50 µg/L, is based on the Standards for Toxic Materials Applicable to Designated Waters, NAC 445A.144 (NAC 445A.144), Municipal or Domestic Supply Standard. If this standard is revised during the term of the permit, the permitted daily maximum discharge limitation will be modified accordingly. This permit limitation is consistent with the previous permit.

With a detection limit 1 µg/L, arsenic was not detected in the Permittee's discharge from July 1998 through January 1999. The average arsenic concentration in the discharge from September 1997 though January 1999 was approximately 2 µg/L, with the non-detects assumed to be 1 µg/L. The maximum arsenic concentration in the discharge was 9 µg/L in September 1997.

Chlorides: The chlorides limitations are based on the Humboldt River at Battle Mountain Gage, Standards of Water Quality, NAC 445A.205 (NAC 445A.205), requirements to maintain existing higher quality (RMHQ). The daily maximum, 70 mg/L, is the single value limitation and the 30-day average, 50 mg/L, is the annual average limitation with municipal or domestic supply as the most restrictive use. These permit limitations are consistent with the previous permit.

Copper, total: The NAC 445A.144 Aquatic Life Standards include equations with hardness as the only variable to determine the 1-hour, acute, and 96-hour, chronic, average dissolved copper standards. The draft permit includes the revised copper aquatic life standards equations that have been adopted by the State Environmental Commission (SEC) but have not yet been approved by the U.S. Environmental Protection Agency (EPA) without the total to dissolved metal conversion factor, 0.960 for both acute and chronic standards.

Dissolved Oxygen: The dissolved oxygen limitation is based on NAC 445A.205, with warm-water fishery as the most restrictive beneficial use. These permit limitations are consistent with the previous permit.

Iron, total: The proposed total iron limitation, 1,000 µg/L, is based on the NAC 445A.144, Aquatic Life Standards. This permit limitation is consistent with the previous permit.

Lead: The NAC 445A.144 Aquatic Life Standards include equations with hardness as the only variable to determine the 1-hour, acute, and 96-hour, chronic, average dissolved lead standards. As required by the CWA regulations, the total to dissolved metal conversion factor, [1.46203 – 0.145712 ln (H)], of NAC 445A.144 was not included. These permit limitations are consistent with the previous permit.

Total Suspended Solids: The TSS discharge limitations, 30 mg/L daily maximum and 20 mg/L 30-day average, are based on the design performance standards of the facility. These values are more restrictive than the NAC 445A.205 warm-water fishery beneficial use standard, 80 mg/L. These permit limitations are consistent with the previous permit.

From September 1997 through January 1999, the maximum TSS concentration at Outfall 001 was 5 mg/L, demonstrating that the permit limits are attainable.

Total Dissolved Solids: The total dissolved solids limitations are based on NAC 445A.205, RMHQs. The daily maximum, 520 mg/L, is the single value limitation and the 30-day average, 425 mg/L, is the annual average limitation with municipal or domestic supply as the most restrictive use. These permit limitations are consistent with the previous permit.

Total Nitrogen: The total nitrogen as nitrogen limitations are based on the NAC 445A.205 RMHQ. The daily maximum, 4.0 mg/L, is the single value, April through November, limitation and the 1.9 mg/L is the annual average limitation with municipal or domestic supply as the most restrictive use. These permit limitations are consistent with the previous permit.

Total Ammonia as N: The total ammonia as nitrogen limitations are based on the Water Quality Criteria for Total Ammonia, NAC 445A.118. The proposed daily maximum of the draft permit is based on the acute water quality criteria for total ammonia for freshwater aquatic life. The proposed 30-day average of the draft permit is based on the chronic water quality criteria for total ammonia for water where freshwater fish in early life stages may be present. These permit limitations are consistent with the previous permit.

Sodium - Sodium Adsorption Ratio: The sodium adsorption ratio limitation, annual average 8, is based on NAC 445A.205, with irrigation as the most restrictive beneficial use. This permit limitation is consistent with the previous permit.

Fluoride: The fluoride limitation, 1,000 µg/L daily maximum, is based on NAC 445A.144, Irrigation Standards. This permit limitation is consistent with the previous permit.

Boron: The boron limitation, 750 µg/L daily maximum, is based on NAC 445A.144, Irrigation Standards. This permit limitation is consistent with the previous permit.

Total Phosphorus: The total phosphorus as phosphorus seasonal limitation, 0.1 mg/L April through November, is based on NAC 445A.205, with warm-water fishery as the most restrictive beneficial use. This permit limitation is consistent with the previous permit.

Turbidity: The turbidity limitation, 50 NTU, is based on NAC 445A.205, with warm-water fishery as the most restrictive beneficial use. This permit limitation is consistent with the previous permit.

Zinc: The NAC 445A.144 Aquatic Life Standards include equations with hardness as the only variable to determine the 1-hour, acute, and 96-hour, chronic, average dissolved zinc standards. The draft permit includes the revised zinc aquatic life standards equations that have been adopted by the SEC but have not yet been approved by EPA without the total to dissolved metal conversion factors, 0.978 acute and 0.986 chronic. The calculated daily maximum and 30-day average discharge limitations will be the same value.

pH: The pH limitations are based on the NAC 445A.205 RMHQ. The daily maximum pH range of between 7.0 SU and 8.6 SU and the annual average pH range of between 7.0 SU and 8.4 SU are based on water contact recreation and wildlife propagation as the most restrictive beneficial uses. This permit limitation is consistent with the previous permit.

Temperature: The temperature limitations on the discharges to the river are based on NAC 445A.205, with warm-water fishery as the most restrictive beneficial use.

The temperature limitation on the discharge to Rock Creek is based on the NAC 445A.126, Class C waters: Description; beneficial uses; quality standards. These temperature standards apply to the portion of Creek below Squaw Valley Ranch. The 34°C standard applies to all Class C waters without trout.

These permit limitations are consistent with the previous permit.

Hardness as $CaCO_3$: Monthly monitoring and reporting of hardness as calcium carbonate has been retained in the permit because the aquatic life standards, NAC 445A.144, for cadmium, chromium, copper, lead, silver, and zinc are functions of the hardness. Monitoring of total cadmium, total copper, total lead, and total zinc is required by the draft permit.

This monitoring is consistent with the previous permit.

Cadmium, total: The NAC 445A.144 Aquatic Life Standards include equations with hardness as the only variable to determine the 1-hour, acute, and 96-hour, chronic, average dissolved cadmium standards. The draft permit includes the revised cadmium aquatic life standards equations that have been adopted by the SEC but have not yet been approved by EPA without the total to dissolved metal conversion factors, $[1.136672 - 0.041838 \ln(H)]$ acute and $[1.101672 - 0.041838 \ln (H)]$ chronic.

Proposed Determination: The Division has made the tentative determination to issue the proposed permit for a five (5) year period.

Procedures for Public Comment: The Notice of the Division's intent to issue a permit authorizing the Permittee to discharge to surface waters of the State of Nevada subject to the conditions contained within the permit, is being sent to the **Elko Daily Free Press** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. July 31, 2007, a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.238.

Prepared by: Bruce Holmgren
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